



Protecting the native frog

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The California red-legged frog (*Rana aurora draytonii*) was listed as "threatened" under the Federal Endangered Species Act (ESA) in 1996. At that time, the U.S. Fish and Wildlife Service had determined that the frog had been extirpated from 70 percent of its historic range from Redding, Calif. to Baja California, Mexico. The California red-legged frog, the largest native frog in California, is widely known for its vibrant coloration, as well as its jumping ability (Mark Twain's jumping frog of Calaveras County). California red-legged frog populations decreased markedly in the late 1800s when they were hunted for human consumption; subsequently habitat loss, and the introduction of non-native predators (i.e. bullfrogs and fish) have resulted in further population declines and isolation of remaining habitat. At LLNL, Environmental Protection Department wildlife biologists work to conserve and enhance California red-legged frog populations at the Livermore site and Site 300 while balancing the needs of LLNL projects and operations.

California red-legged frog life cycle

(Left to right)

- Egg mass (2,000 – 4,000 eggs)
- Metamorphic larva
- The California red-legged frog



Our largest native frog

(Left to right)

- Gravid female frog
- Front view of adult frog
- Adult frog being tracked by biologists (note radio transmitter belt) in the Arroyo Las Positas (Livermore site)



Livermore site and Site 300 habitat

(Left to right)

- Drainage Retention Basin
- Arroyo Las Positas
- Elk Ravine (Site 300)



Management

(Left to right)

- Biologists electrofishing the Drainage Retention Basin to remove non-native fish
- Biologist removing a bullfrog egg mass
- Silt fencing used to exclude frogs from a project area where they would be at risk

